

THE GASTEROMYCETES OF AUSTRALASIA. XVII.

SOME NEW SPECIES OF HYMENOGASTRACEAE.

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Three new species of Hymenogastreae are here described and four new combinations recorded. The new combinations will be discussed in succeeding papers of the series.

OCTAVIANIA PALLIDA (Massee and Rodway), n. comb.

Gymnomyces pallidus Mass. et Rodw., *Kew Bull.*, 1898, p. 125.

Type locality.—Cascades, Hobart.

OCTAVIANIA GLABRA (Rodway), n. comb.

Hydnangium glabrum Rodw., *Proc. Roy. Soc. Tas.*, 1920 (1921), p. 157.

Type locality.—Cascades Hobart.

OCTAVIANIA BRISBANENSIS (Berkeley and Broome), n. comb.

Hydnangium australiense Berk. et Br., *Trans. Linn. Soc.*, ii, 1883, 66.—*Octaviana alveolata* Cke. et Mass., *Grev.* xvi, 1888, 2.—*Hydnangium brisbanense* Berk. et Br., ex Cke., *Hbk. Aust. Fungi*, 1892, 247.—*Arcangeliiella australiensis* (Berk. et Br.) Dodge, *Ann. Miss. Bot. Gard.*, xviii, 1931, 463.

Type locality.—Brisbane, Queensland.

OCTAVIANIA STRIATA, n. sp.

Plants irregularly globose or pyriform, 15–25 mm. diameter, exteriorly reddish-brown and dull, smooth but wrinkled when dry. Peridium compact, 60–110 μ thick, of strongly gelatinized, densely woven hyphae. Gleba ochraceous when dry, firm, cells somewhat elliptical, or slightly labyrinthiform, empty, variable in size, about 2–4 mm. larger below; sterile base present or absent; tramal plates 55–75 μ thick, of densely woven gelatinized hyphae, firm; basidia 4-spored. Spores globose, hyaline, 8–10 μ diameter (including reticulations), shortly pedicellate, strongly reticulated, wings to 1.5 μ tall, arranged in the form of striae.

Distribution.—Australia.

New South Wales: Neutral Bay, 6/12, J.B.C.* (Det. by L. Rodway as *H. brisbanense*).—South Australia: Mt. Lofty, 6/24, J.B.C.* (Type collection); same locality, 5/28, J.B.C.*

The species resembles *O. brisbanensis*, but differs in that although the spores are reticulated, the reticulations are arranged in the form of striae, and tend to parallel one another save where they converge at the poles; the peridium is of a somewhat different texture, and the tramal plates are more strongly gelatinized, so that the whole plant is much firmer. Lactiferous ducts are apparent in two collections, but have not been noted in the third, despite a careful search.

DENDROGASTER FULVUS (Rodway), n. comb.

Hymenogaster fulvus Rodw., *Proc. Roy. Soc. Tas.*, 1918 (1920), 109.

Type locality.—Cascades, Hobart.

DENDROGASTER PIRIFORMIS, n. sp.

Plants pyriform or subturbinate, to 15 mm. tall, smooth, reddish-brown. Peridium double, 200–250 μ thick, exterior layer of pseudoparenchyma, interior layer of brown, partly gelatinized parallel hyphae. Gleba reddish-brown or ferruginous, cells subglobose, 1–2 mm.; with a definite sterile base and traversed by a pallid yellow, dendroid, percurrent columella; tramal plates 90–110 μ thick, pseudoparenchymatous; basidia 4-spored. Spores obovate, chestnut-brown, 12–14 \times 6.5–8 μ , shortly pedicellate, distinctly areolate, wall to 1.5 μ thick.

Distribution.—Australia.

South Australia: Encounter Bay, 8/23, J.B.C.* (Type collection, in herb. Cleland).

The species is characterized by the double peridium and large obovate spores.

GAUTIERIA MACROSPORA, n. sp.

Plants subglobose or somewhat irregular, 10–25 mm. diameter, pallid-white with a tinge of bluish-green, becoming ochraceous when dry. Peridium 150–200 μ thick, of a single layer of pseudoparenchyma and a prominent layer of crystals lying next the gleba. Gleba umber-brown, cells minute, 2–3 mm., filled with spores, appearing compact; traversed by a branched columella arising from a scanty sterile base; tramal plates 30–80 μ thick, of woven gelatinized hyphae; basidia 2-spored. Spores broadly elliptical or broadly fusiform, 20–27 \times 11–14 μ , ferruginous, apex acuminate, base shortly pedicellate, ribs about 8–10 in number, acute, vaguely anastomosed and to 2.5 μ tall.

Distribution.—Australia.

South Australia: Mt. Lofty, 7/28, J.B.C.* (Type collection).

The species may be separated from *G. albidula*, which it resembles in the large spores, by the larger cells of the gleba, different tramal plates, and broader, less acuminate, more acutely ribbed spores. Dr. Cleland recorded that plants of this abundant collection when fresh possessed a fragrant smell as of strawberry jam.
